

USN

--	--	--	--	--	--	--	--	--	--



10CV843

Eighth Semester B.E. Degree Examination, Aug./Sept. 2020
Urban Transport Planning

Time: 3 hrs.

Max. Marks:100

Note: Answer FIVE full questions, selecting at least TWO questions from each part.

PART - A

- 1 a. Explain the “systems approach” to urban transport planning process with a neat flow chart. (10 Marks)
- b. (i) Explain the scope for urban transport planning. (05 Marks)
- (ii) Explain Interdependence of Land use and traffic. (05 Marks)
- 2 a. List out the various stages in urban transport planning. Explain any two. (10 Marks)
- b. Explain “study area”. What are the factors to be considered in the selection of external cordon line? (10 Marks)
- 3 a. List the factors to be considered when dividing the area into zones. (10 Marks)
- b. What are the types of surveys that are usually carried out in transport planning? Explain any three. (10 Marks)
- 4 a. What are the factors Governing Trip generation and attraction rates? (10 Marks)
- b. Define “Category Analysis”. What are the assumptions to be made in category analysis? (10 Marks)

PART - B

- 5 a. The total trips produced in and attracted to the three zones A, B and C of a survey are in the design year are tabulated as,

Zone	Trips produced	Trips attracted
A	2000	3000
B	3000	4000
C	4000	2000

- It is known that the trips between two zones are inversely proportional to the second power of the travel time between zones, which is uniformly 20 minutes. If the trip interchange between zones B and C is known to be 600, calculate the trip interchange between zones A and B, A and C, B and A, C and B. (10 Marks)
- b. Explain any two growth factor methods and any one synthetic method. (10 Marks)
 - 6 a. With a neat flow chart explain modal split carried out between trip generation and trip distribution. (10 Marks)
 - b. Briefly explain the factors affecting modal split. (10 Marks)
 - 7 a. What are the applications of traffic assignment? (10 Marks)
 - b. Explain the different techniques of traffic assignment that are available. (10 Marks)
 - 8 a. Explain the various difficulties in transport planning for small and medium cities. (10 Marks)
 - b. (i) What are the considerations to be made while selecting a ‘Land use transport Model’? (05 Marks)
 - (ii) Write a short note on structure of “Lowry Model”. (05 Marks)

* * * * *

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
 2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.